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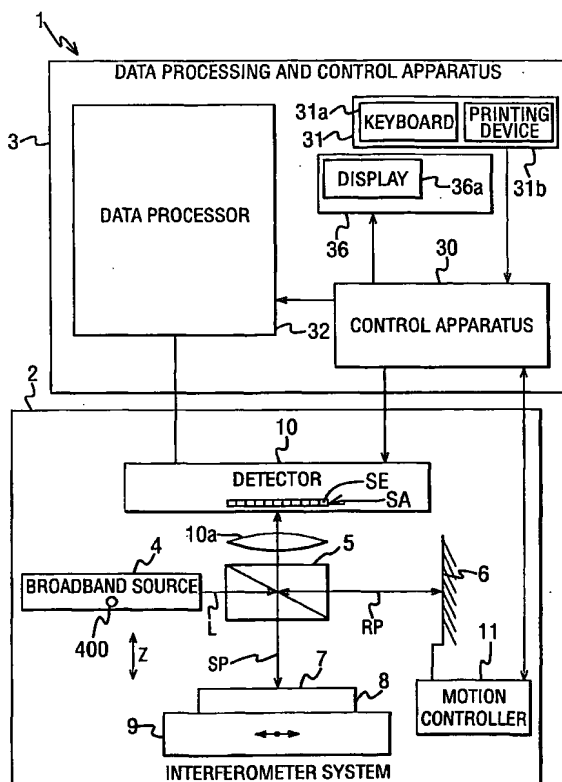
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(54) Title: A SURFACE PROFILING APPARATUS

(57) **Abstract:** Light is directed along a sample path to-
wards the sample surface and along a reference path to-
wards a reference surface such that light reflected by the
sample surface and light reflected by the reference surface
interfere. Relative movement is effected between the sam-
ple surface and the reference surface along a measurement
path and the light intensity resulting from interference be-
tween light reflected from the reference surface and regions
of the sample surface is sensed at intervals along the mea-
surement path to provide a number of sets of light intensity
data values with each light intensity data value representing
the sensed light intensity associated with a corresponding
one of said regions. The sets of light intensity data are pro-
cessed to determine a position along the measurement path
at which a predetermined feature occurs in the light inten-
sity data for each sensed region and to enhance image data
representing the intensity data to facilitate the detection by
a user of the interference fringes.



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